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A Publication Concerned With
Natural History and Conservation

The Ottawa Field-Naturalists' Club

TRAIL & LANDSCAPE

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The Ottawa Field-Naturalists' Club

— Founded 1879 —

President

Jeff Harrison

Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, a quarterly devoted to reporting research in all fields of natural history relevant to Canada, and TRAIL & LANDSCAPE, a quarterly providing articles on the natural history of the Ottawa Valley and on Club activities.

Field Trips, Lectures and other natural history activities are arranged for local members; see "Coming Events" in this issue.

Membership Fees: Individual (yearly) \$20

Sustaining (yearly) \$50

Family (yearly) \$22

Life (one payment) \$500

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Welcome, New Members

Ottawa Area

Carole Baughan	Bonnie G. Bedford & family
Geoffrey E. Burchill	James Alexander Campbell
Mary Anne & Tullio Caputo & family	Norma E. Coughlin
Moyfrid G. Davies	Nathalie C. Gauthier
Louise Gauvin	Michael E. Gillis
David L. Gravelle	Mrs. Maria E. Henry
Tom Hills	Patricia A. Hunt
Douglas A. Hyde & S. Jill Rick	Marcie L. Jacklin
Ruth M. Kempthorne	Frances M. Kirkham
Martine A. Lanoix	Diane S. MacIntosh & family
Dinah M. & Roger MacLean	Ian D. Macredie
Richard R. & Wendy McQuaig	Lee Narraway & Pete Barrett
Jane M. Orsak & Paul N. Chownard	Mr. & Mrs. Glen M. Pettinger
Sheila M. Pugsley	Robert A. Steele & family
Edward B. Samuel	
John & Sheila Urquhart	

Other Areas

David A. Boehn	Peter J. Carson &
Don Mills, Ontario	Mary E. Gartshore
	La Salette, Ontario
Bruce C. Forbes	
Montreal, Quebec	

April 1989

Eileen Evans,
Chairman,
Membership Committee.

DEADLINE: Material intended for the October - December issue must be in the Editor's hands before July 1st at the latest.

Alfred Bog — Target Reached!

Frank Pope
Chairman, Alfred Bog Committee

We did it! Around the end of March we passed the \$15,000 target we had set for the Club's contribution to help pay for the land purchased by the Nature Conservancy of Canada from Cobi Foods last fall.

As of April 14th, 1989, the figures are:

Total value of donations received:	\$15,473
Total number of donors:	257
Number of donations of \$50 or more:	134
Largest donation:	\$1,000

Donors of \$50 or more qualify for the honorary deed. Unfortunately, the deeds are late being produced due to staff shortages at the Nature Conservancy of Canada. We apologize for this and assure you that even if you have not received your deed by the time you read this report, it is on its way.

Fund-raising will continue until the loan required to purchase the Cobi Foods property has been retired, and thereafter until we are able to protect the balance of the bog.

In the meantime, the Alfred Bog Committee is arranging for a life science inventory of the bog, for a program of contacting other landowners to encourage them to protect their portion of the bog and, eventually, for the development of a management plan for acquired lands.

A regular Club outing to the bog has not been scheduled this year. However, Don Cuddy will be leading two trips into the bog: on June 17th to view orchids and other late spring flora, and on August 12th to catch some of the later flowering species (like Yellow-eyed Grass). Anyone interested in joining him on one of these days should call the Club number for details (722-3050 after 10 a.m.).

On behalf of the Alfred Bog Committee, I wish to express our sincere thanks to all of the Ottawa field naturalists who responded to the appeal for funds to purchase land in Alfred Bog. □

The 40th Anniversary of the Macoun Field Club ...and Counting

Paul Hamilton

We made it! The Macoun Field Club is now over 40 years old and is still on the trail. In addition to the 42nd edition of *The Little Bear*, an anniversary supplement was published. This supplement, an anthology drawn from the past 15 years of *The Little Bear*, was compiled and edited by Maria Darragh. It lists the 524 club members (1973-1988) and also includes many noteworthy events.

The Club held its anniversary party in May 1988, with many past and present members in attendance. Sixty-one awards were presented to current members, with the Bill Baldwin scholarships going to Carina Cojeen and David Manga. A special composite drawing of past leaders was donated to the club by artist Susan Laurie-Bourque, and copies were presented by Dr. S. Cumbaa of the National Museum of Natural Sciences to the 15 people who have guided the club activities since 1973. A slide presentation assembled by Maria Darragh was given with commentary by Len Marhue and Jim Johnston. A good party always has its cake, or should I say, had a cake.

Special guests at the party included Mrs. B. Baldwin, Mrs. F. Ryan, Dr. E. Bousfield and Jacques Fournier, Deputy Director of the Museum.

A special thanks to Bill Gummer for his interest in and active support of the Macoun Field Club.



Macoun Field Club leaders 1973-1988:

Top row: Jim Johnston, Alex Fournier, Mike Shchepanek, Len Marhue, Arnet Sheppard;

Middle row: Stephen Darbyshire, Sharon Gowan, Irwin Brodo, Erich Haber, Jerry Fitzgerald;

Bottom row: Sharon Smith, Robin Collins, Paul Hamilton, Robert Lee, David Gray.

Illustration by Susan Laurie-Bourque. □

John Macoun

Canadian Naturalist

Joe Shepstone

July 20th [1872] - Sailed all night along the N.E. coast of the great Lake, and in the morning entered the landlocked harbour of Gargantua.

Two or three days previously the Chief had noticed among the passengers, a gentleman out for his holidays on a botanical excursion to Thunder Bay, and, won by his enthusiasm, had engaged him to accompany the expedition. At whatever point the steamer touched, the first man on shore was the Botanist, scrambling over the rocks or diving into the woods, vasculum in hand, stuffing it full of mosses, ferns, lichens, liverworts, sedges, grasses, and flowers, till recalled by the whistle that the captain always obligingly sounded for him. Of course such an enthusiast became known to all on board, especially to the sailors, who designated him as "the man that gathers grass" or, more briefly, "the hay picker" or "haymaker". They regarded him, because of his scientific failing, with the respectful tolerance with which fools in the East are regarded, and would wait an extra minute for him, or help him on board, if the steamer were cast loose from the pier before he could scramble up the side.

So reads an entry from the diary of the Reverend George Grant in his chronicle of Sandford Fleming's expedition across Canada, *Ocean to Ocean*, in 1872. In this entry we are introduced to an energetic little Irishman named John Macoun. After emigrating from Ireland in 1850 during the potato famine, the self-taught Macoun rose from a farm labourer to Dominion Field Naturalist and Botanist, university professor, lecturer and author. In 1881, after 10 years spent combing Canada's prairies, Macoun's testimony was instrumental in deciding the route for the transcontinental railroad linking Winnipeg with Vancouver and in the process dictated the future of the western provinces.

But we don't often think of John Macoun these days. There is a mountain and a young naturalists' club named after him - and that's about it. A short look at this man's life, though, should be an inspiration to all of us who love the discovery of exploring Canada's natural history.

In 1856, at the age of 25, John Macoun decided to give up itinerant farming and become a teacher and botanist. This would seem difficult, to say the least, by today's standards. Macoun

had received a very basic education in Ireland that seemed more geared to pugilism than passing. But he was determined to become a teacher, and after studying a grammar textbook for three days and walking 65 km (in mid-winter) to the county inspector, he talked his way in.

John Macoun received his teaching certificate and began his teaching career in the township of Brighton, Ontario. During the summer vacations, Macoun journeyed throughout southern Ontario collecting plants and building up both his herbarium and a reputation in the United States and Great Britain as a competent amateur botanist. He recalls,

The upshot of my ten years or more of botany had given me standing in England and Scotland as well as in the United States, and I was becoming known even in Canada and my own town of Belleville. This year [1868], Albert College rose from an Academy to a University and the necessity arose to increase the staff and the range of subjects. Bishop Albert Carman, Principal of the University asked me if I would undertake the chair of Natural History, and give my lectures in the morning. I fell in with the arrangement and took up the work. I had never heard a lecture in College, but I was a teacher and succeeded to my own satisfaction anyway, and as there were no complaints, I went on in my own way making sure of the statements I made. My knowledge of botany and geology, physical geography and meteorology was all first hand and I could give as much in half an hour as the average student could swallow, if not digest.

As a professor, Macoun continued his summer explorations, and in the summer of 1872, then 41 years old, he embarked on a voyage around Lake Superior to collect local plants. At the same time, Sandford Fleming's expedition, which was searching for a favourable route for the promised Canadian Pacific Railway, was on the same ship heading for Port Arthur and points west. The members of the expedition were so taken with Macoun's enthusiasm and knowledge that they invited him along as expedition botanist.

Macoun's trip with Fleming marked a major step forward in his career. Far from finding the Great American Desert described by Captain Palliser in 1857, Macoun saw a rich and fertile prairie stretching from Winnipeg to the foothills of Alberta. While it was later shown that both situations were correct - Palliser had seen the prairies during one of the frequent droughts and Macoun had seen the prairies during the wettest decade in more than a century - Macoun used his observations of the summer expedition to petition the government to choose a southern route for the railway.

The trip took approximately seven months to complete, during which time Macoun was able to continue building his extensive herbarium collection (at the time of his death there were over 100,000 sheets of plant specimens in the Dominion Herbarium), and he encountered a lively array of thieves, murderers, confidence men, tornadoes, thunderstorms, blizzards and floods. He crossed the prairies during July and August, headed for the Peace River in early September, crossed the Rocky Mountains in early winter, and spent Christmas on the Pacific coast.

In 1878, Sir John A. Macdonald's government organized 10 parties to investigate the value of the prairies for farming and industry. John Macoun led one of the expeditions and left in early May 1879. His route was to take him along the exact path traced by Captain Palliser in 1857. While the other nine expeditions surveyed the "Fertile Belt" along the Saskatchewan River, Macoun followed the more southerly 102nd Meridian. Again, the Palliser Triangle had, "plenty of water, open meadows and copses of poplar, and over the whole country was an immensity of flowers".

Macoun was rewarded for his expeditions with a permanent appointment to the Geological and Natural History Survey of Canada in January of 1884 as Dominion Naturalist and Botanist. That winter, Macoun wrote *Manitoba and the Great North-West*. The importance of this book for the prairie homesteaders cannot be overestimated. In 675 pages Macoun set down his knowledge accumulated from the previous 10 years' exploration of the west in a self-confessed "encyclopedia of information". The book sold widely and became the "bible" for pioneers new to the land. There are chapters on the geography and history of the region as they relate to climate, water supply, timber, minerals and fuel; on native flora, fauna and peoples; on where and how to grow which crops; and on raising stock animals.

Following Macoun's appointment to the Geological and Natural History Survey (shortened to the Geological Survey of Canada in 1889), he moved to Ottawa and continued making his annual summer excursions. The winters were spent cataloguing his extensive collections of plants, birds, marine life, insects and fish. Macoun, as well, wrote *Catalogue of Canadian Plants* based on the scattered lists of plants found in Canada.

In 1886, the Colonial Exhibition was held in London, England. Its purpose was to bring together in one place the culmination of knowledge and people found throughout the British Empire. John Macoun headed the Natural History exhibit with a complete set of plants from his herbarium. Once in England, the exhibit leader, Dr. Selwyn, and Macoun were listed as "distinguished Canadians" and were invited to many functions. At one dinner, Macoun brought up an issue topical by today's standards:

Many things were talked of while we were eating lunch and, amongst others, the status of the Colonies under England. Many opinions were given and, of course, I had my say as well as the others. I took the stand that protection in Canada was the same as free trade in England, because England wanted raw materials to help their people, while we wanted to manufacture our own materials ourselves.

Soon after returning to Canada, Macoun was made Assistant Director and Botanist. He continued his summer excursions to the many regions of Canada and began collecting in earnest all forms of natural history for the proposed Victoria Memorial Museum - "his" Canadian Pacific Railway played an important role in transporting this self-made man quickly from coast to coast. During one of these excursions, Macoun, with his wife and daughter, went to Cape Breton and stayed at a hotel in Baddeck. One morning the hotel landlord told Macoun's wife and daughter about a curious old man he had seen:

"If you had been here a little while ago you would have had a good chance to talk with an old tramp who was here and who was all the time hunting round amongst the rocks looking for grasses and one thing or another." My daughter, Nellie, said: "That tramp is my father." She tells me that the poor man nearly fainted.

A stroke in 1911 slowed Macoun up though he continued botanizing locally around Ottawa. In 1916 he moved with his wife, daughter and son-in-law to Sidney, B.C., where he met with local naturalist groups and began writing a natural history column in the *Sidney Review* under the pseudonym "Rambler". The Rambler died on July 18, 1920, at the age of 89.

John Macoun's importance to biology in Canada can be measured in terms of his extensive collections of plants, birds and other natural history; his publications cataloguing the diversity and biogeography of plant and animal species in Canada; his awareness of and pleas for the conservation of our natural resources; and perhaps most importantly, his enthusiasm for a new science in Canada that gave encouragement to men like Ernest Thompson Seton, and to the members of The Ottawa Field-Naturalists' Club and Macoun Field Club. He should be remembered.

August 21st. [1875, exploring the Peace River] Poor food and hard work now began to tell on me. My stomach loathed raw pemmican, and all other food was gone - our gun was useless - and it became painfully evident that from some unaccountable cause the boats had not yet left Fort Chipewyan. Sixty miles lay between us and safety, and we must either hurry on or starve.

John Macoun, *Autobiography of John Macoun*.

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Grant, Rev. George M. 1925. Ocean to ocean, Sandford Fleming's expedition through Canada in 1872. The Radisson Society of Canada, Toronto.

Macoun, John. 1979. Autobiography of John Macoun, Canadian explorer and naturalist. Second Edition. The Ottawa Field-Naturalists' Club, Ottawa.*

1882. Manitoba and the Great North-West. The World Publishing Company, Guelph. □

* Autobiography of John Macoun, Canadian Explorer and Naturalist may be purchased from The Ottawa Field-Naturalists' Club (Box 3264, Postal Station C, Ottawa, Ontario K1Y 4J5). The price is \$12.50 and there is a charge of \$2.00 for postage and handling.

OFNC Committee Members

Bill Gummer

The membership of the Club's committees for 1989 is given in the following tabulation. A total of 111 positions is shown; a number of people fill more than one position, but 82 different Club members are involved in these activities. In the lists, Chairmen are shown with an asterisk (*), Co-chairmen by two (**), and an "interim" chairman by three (***) . Vice-Presidents participate as usual and are shown by (VP) unless they are regular members.

AWARDS

Bill Gummer*
(596-1148)
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Enid Frankton
Peter Hall
Roy John (VP)
Diana Laubitz
Mary Stuart

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Tony Beck
Marg Benson
Allan Cameron
Michelle Elder
Bernie Ladouceur
Larry Neily
Daniel Perrier
Joyce Reddoch
Mike Runtz
Ken Strang (VP)
Daniel St-Hilaire

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Robert Gorman
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Edith Ikeda
Aileen Mason
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Peter Croal
Barbara Desrochers
Peter Hall
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Heidi Klein
Fern Levine
Lynda Maltby
Michael Murphy
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Richard Scott
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Ewen Todd
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MACOUN

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Barbara Gaertner
Paul Hamilton
Roy John (VP)
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Joe Shepstone
Patricia Whitridge

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Colin Gaskell
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Rick Leavens
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Bill Cody
Francis Cook
Bill Gummer
Roy John (VP)
Jim Montgomery
Elizabeth Morton
Joyce Reddoch

1988 OFNC Awards

Bill Gummer, Chairman,
and Awards Committee Members

Based on nominations received in late 1988 and on Awards Committee recommendations, the Council approved the granting of OFNC Awards as described in the following sections.

For the first time in 10 years, no Honorary Member has been selected. This is because the Council operates according to a motion (recorded 9 September 1985) stating that a limit of 25 Honorary Members is to be established, and currently the quota is filled. This limit helps maintain the significance of Honorary Memberships.

Also for the first time since inauguration of the Club's awards series, a member has been granted two awards at once. This is related to the Alfred Bog story, where Awards Committee, and then the Council, agreed that the subject was important enough to justify the double award.

Full citations will appear in *The Canadian Field-Naturalist*.

SERVICE AWARD - Lois Cody

Starting in 1968, with a three-year break, Lois Cody has kept track of the finances of *The Canadian Field-Naturalist* (CFN), and, since 1979, of the whole Club.

Lois records and banks incoming money according to various Committee and other budgets, keeps CFN dollars separate from Club dollars, handles donations to the Club or to special projects (for example, Alfred Bog) and provides receipts, handles mail orders for Club publications and other items, and she sorts and redirects incoming Club mail.

Lois rounds out her support of the Club with her cheerful presence at social events. Also involved in golf, curling, Friends of the National Gallery, and other areas, for Lois service seems to be a way of life.

MEMBER OF THE YEAR AND CONSERVATION AWARDS - Frank Pope

Frank has the distinction of being the first person to receive two Club awards in the same year. This follows his deep involvement in the fight to save Alfred Bog from agricultural or other development. In 1985, while still President of the Club, Frank took over chairmanship of the steering group representing



SERVICE AWARD
Lois Cody



MEMBER OF THE YEAR and CONSERVA-
TION AWARDS: *Frank Pope*



ANNE HANES NATURAL HISTORY
AWARD: *Daniel F. Brunton*



PRESIDENT'S PRIZE
Marg Benson
Photographs by Ken Taylor.

many prominent conservation organizations, and led the drive culminating in the purchase of a large piece of the bog last autumn. He continues to be involved in fund raising and in development of appropriate management procedures.

Now in his 11th year on the Council, Frank was President in 1984-85, has served on several Committees, chairs the Finance Committee, and filled the temporarily vacated position of Treasurer during much of 1988. Always willing to step in where needed, Frank Pope is a worthy recipient of these two awards.

ANNE HANES NATURAL HISTORY AWARD - Daniel F. Brunton

Dan Brunton is prominent in our Club, having served as President (1982-83) and in many other positions. For many years he has provided members, through OFNC and other publications, with information on District flora and fauna and their habitats. With his extensive knowledge of our area, he produced the book *Nature and Natural Areas in Canada's Capital* published in 1988 by *The Ottawa Citizen*. This book covers the significant aspects of our natural history. It identifies and describes 30 "places to see", and will long be appreciated by residents and visitors alike.

Dan's book, with its emphasis on our part of the Ottawa Valley, has been well received by the public. It will add to the stature of the Club, and it makes him a deserving recipient of the Anne Hanes Natural History Award.

PRESIDENT'S PRIZE - Marg Benson

Marg Benson is the recipient of the 1988 President's Prize. This recognizes her work in arranging the Club's participation in the 1988 Peregrine Falcon Project. To meet the requests of the Canadian Wildlife Service and the Ontario Ministry of Natural Resources, she arranged for volunteers to keep records of bird behaviour and actions during the critical first weeks following release. She ensured that teams and leaders were aware of program goals, and prepared for alerts if anything went wrong.

Marg succeeded in involving more volunteers from the general membership than anyone previously, with 20 people in all. She showed the Canadian Wildlife Service that the Club could be of real help.

Past President Bill Gummer, presenting the fourth of the modern President's Prizes, congratulated Marg for her success.
□

Fens of the Ottawa District Update

Joyce M. Reddoch

Ten years ago I described five important calcareous fens in the Ottawa District, one in Quebec and four in Ontario (Reddoch 1979). Since then, wetlands of all kinds have been the subject of considerable investigation across the continent. In Southern Ontario, the Ontario Ministry of Natural Resources is working to identify and classify all existing wetlands, with the result that the significance of the four local fens is now more fully realized. The Ministry (1988) has designated all four local Ontario fens and their surrounding wetlands as Class 1 wetlands. These wetlands also have been recognized as high priority wetlands in Southern Ontario by the Federation of Ontario Naturalists (1985). However, neither designation carries with it any legal protection.

Two of the fens, the Richmond Fen and the Phragmites Fen, are part of a wetlands complex in the Marlborough Forest adjacent to the Jock River in Rideau Township. In the last decade, the Regional Municipality of Ottawa-Carleton has acquired almost all of the properties in which these fens occur (RMOC 1988) in accordance with its plan to bring all of the Marlborough Forest into public ownership.

The Long Swamp Fen is a patterned fen on the saddle between Cody Creek and the Jock River in West Carleton Township. The Region has acquired several parcels of land in this wetlands complex also, including the property containing the fen.

The Mud Pond Fen is a partially floating fen mat at the edge of a marly pond that is part of the Constance Creek wetlands complex in Kanata. Still privately owned, it is threatened by development pressures.

The single Quebec fen fills the narrow end of a small lake west of Poltimore. Being privately owned, it also has no protection. Between 1983 and 1985, the surrounding swamp and slopes were logged. Ring counts of some of the cedar stumps in the swamp showed them to be about 110 years old. The cutover areas of swamp are now undergoing considerable change. Exposure to sunlight has incinerated the delicate swamp-floor plants and assorted weeds are taking their place. Logging should not affect the water table of the fen because it is contiguous with the lake.

The five fens can be categorized as *intermediate to rich*



fens, based on their acidities (pH range 6.0 - 6.5) and plant compositions (Crum 1988). All are components of peatlands that include (or used to include) mixed cedar swamps.

The following Table is a list of the regionally rare, sparse and uncommon vascular plants (categories of abundance defined by Gillett and White 1978) currently known to have grown in the five Ottawa District fens described above. Compared to the original table (Reddoch 1979), it incorporate additions as well as corrections (for example, Dugal 1982), inadvertent omissions (Reddoch and Reddoch 1987a, 1987b) and name changes. It does not include regionally common species.

The plants listed in the Table are those found in the open fen habitat, principally the fen floor but also including the mounds around tree clumps (and the ridges (flarks) in the patterned fen). This study does not deal with the plants of the surrounding swamps.

The most numerous additions to the plant list are in the genus *Carex* (sedges). As part of her work on Ottawa District sedges, Ilona Zgierska has examined every specimen collected and has added several species of her own.

Collections made during the course of this ongoing study are being deposited in the National Herbarium (CAN) and the herbarium of the Department of Agriculture (DAO). I welcome news of any additional discoveries in these fens.

Acknowledgements

I thank Ilona Zgierska for sharing with me her work on District fen sedges, Don Cuddy and Harry McLeod of the Ontario Ministry of Natural Resources for providing useful information, and the curators and staffs of the two herbaria cited for their cooperation and help. I appreciate Allan Reddoch's company and help in the field.

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Crum, H. 1988. A focus on peatlands and peat mosses. University of Michigan Press, Ann Arbor. 306 pp.

Dugal, A. 1982. Bog Bedstraw (*Galium labradoricum*) in Ottawa District fens. *Trail & Landscape* 16(3): 126-130.

Opposite: Carex chordorrhiza has been found in two Ottawa District fens. This species was not previously known in the District (Gillett and White 1978). Sumi painting by the author.

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1987b. The three "pink" peatland orchids. *Trail & Landscape* 21(3): 196-201.

Regional Municipality of Ottawa-Carleton Planning Dept. 1988. Marlborough Forest (map).

RARE AND UNCOMMON PLANTS IN OTTAWA DISTRICT FENS

	Rich	Phra	L.S.	M.P.	Polt
<i>Scheuchzeria palustris</i>	X	X			
<i>Triglochin maritimum</i>	X	X	X		
<i>Bromus ciliatus</i>	X	X	X		
<i>Muhlenbergia glomerata</i>	X	X	X	X	X
<i>Phragmites communis</i>	X	X		X	
<i>Carex chordorrhiza</i>			X		X
<i>Carex cryptolepis</i>	X				
<i>Carex diandra</i>	X		X	X	X
<i>Carex disperma</i>		X	X	X	X
<i>Carex exilis</i>	X		X		
<i>Carex lasiocarpa</i>	X	X	X	X	X
<i>Carex limosa</i>	X	X	X		X
<i>Carex livida</i>	X	X	X		
<i>Carex pauciflora</i>					X
<i>Carex paupercula</i>			X	X	X
<i>Carex prairea</i>			X		X
<i>Carex tenuiflora</i>			X		X
<i>Carex trisperma</i>			X		X
<i>Carex vaginata</i>			X		
<i>Cladium mariscoides</i>	X	X		X	
<i>Dulichium arundinaceum</i>	X				X
<i>Eriophorum viridi-carinatum</i>		X	X	X	X

	Rich	Phra	L.S.	M.P.	Polt
<i>Rhynchospora alba</i>	X	X	X	X	
<i>Scirpus hudsonianus</i>	X	X	X	X	X
<i>Smilacina trifolia</i>		X	X	X	X
<i>Amerorchis rotundifolia</i>					X
<i>Arethusa bulbosa</i>			X		X
<i>Calopogon tuberosus</i>		X	X	X	X
<i>Liparis loeselii</i>	X				
<i>Platanthera dilatata</i>		X	X		X
<i>Platanthera leucophaea</i>	X	X			
<i>Pogonia ophioglossoides</i>		X	X	X	X
<i>Spiranthes romanzoffiana</i>	X	X	X		
<i>Salix candida</i>	X	X	X	X	
<i>Salix pedicellaris</i>	X	X		X	
<i>Salix serissima</i>			X	X	
<i>Betula pumila</i> var <i>glandulif.</i>	X	X			
<i>Sarracenia purpurea</i>	X	X	X	X	X
<i>Potentilla fruticosa</i>				X	
<i>Potentilla palustris</i>	X			X	X
<i>Rosa palustris</i>				X	
<i>Viola nephrophylla</i>		X			
<i>Decodon verticillatus</i>				X	
<i>Epilobium leptophyllum</i>	X	X	X	X	X
<i>Andromeda glaucophylla</i>		X	X	X	X
<i>Chamaedaphne calyculata</i>			X	X	X
<i>Kalmia angustifolia</i>		X	X		X
<i>Ledum groenlandicum</i>		X	X	X	X
<i>Vaccinium macrocarpon</i>				X	
<i>Vaccinium oxycoccus</i>		X	X	X	X
<i>Menyanthes trifoliata</i>	X	X	X		X
<i>Utricularia cornuta</i>			X		
<i>Utricularia intermedia</i>	X	X	X		
<i>Utricularia minor</i>	X		X		X
<i>Galium labradoricum</i>	X	X	X	X	X
<i>Lonicera oblongifolia</i>	X	X	X	X	
<i>Campanula aparinoides</i>	X	X	X	X	
<i>Lobelia kalmii</i>	X	X	X		
<i>Aster borealis</i>	X	X	X	X	X
<i>Aster umbellatus</i>		X	X	X	
<i>Solidago uliginosa</i>	X	X	X	X	X

Down, Grass, Down!

John Sankey



In 1987, I found a sprig of *Veronica filiformis* in my back yard meadow. Last spring, it covered a patch some 10 cm in diameter and flowered profusely (Figure 1). The bloom is of beautiful form, a light blue four-petaled cup with delicate dark blue markings, enfolding two dark blue stamens streaked with ivory pollen.

Filiformis means "of fine threadlike structure". My flower stalks, each solitary from a leaf axil at the end of a creeping shoot, are 15 mm long but barely 0.2 mm in diameter. The pistils are even more slender, 4 mm long but barely 0.03 mm in diameter! (That's less than 1/3 the thickness of the paper that *Trail & Landscape* is printed on.)

Called Slender Speedwell by some, it is rare in the Ottawa District. Originally from Asia Minor, it is cultivated, and now widespread and naturalized, in Europe. It has been sold in North America as a rock garden plant since the 1930s. A perennial, it prefers a fertile and only moderately sunny environment. It is a sterile plant; its flowers apparently do not set seed. However, there are preformed roots at every node, even young ones. Roots appear from a cutting in less than a week and grow vigorously. It is spread, therefore, by the physical dismemberment of grass cutting and is considered a problem weed in turf by some.

It also appears to suppress the growth of grass. Not a single blade was visible in the area it covered the previous fall, although it was solid grass there last year. Last spring, it was still rooted only at one point. Its growth is not dense enough to stop grass growing by shading. New growth, snaking through surrounding grass, does not seem to affect anything. And, two small shoots of Fragrant Bedstraw (*Galium triflorum*) sprouted up in its area during July.

Now, suggestions that chemicals produced by one plant actively suppress the growth of other species were spurned by botanists for many years. Such effects were "obviously" due to a lack of knowledge of nutrients in the soil. An impossible standard of proof was demanded of those who suspected otherwise. As a result, very little work has been done in this area. (No such inhibitions can be found where suppression of animals or



Figure 1. Flowers of *Veronica filiformis* in the author's back yard. Photographs by the author.

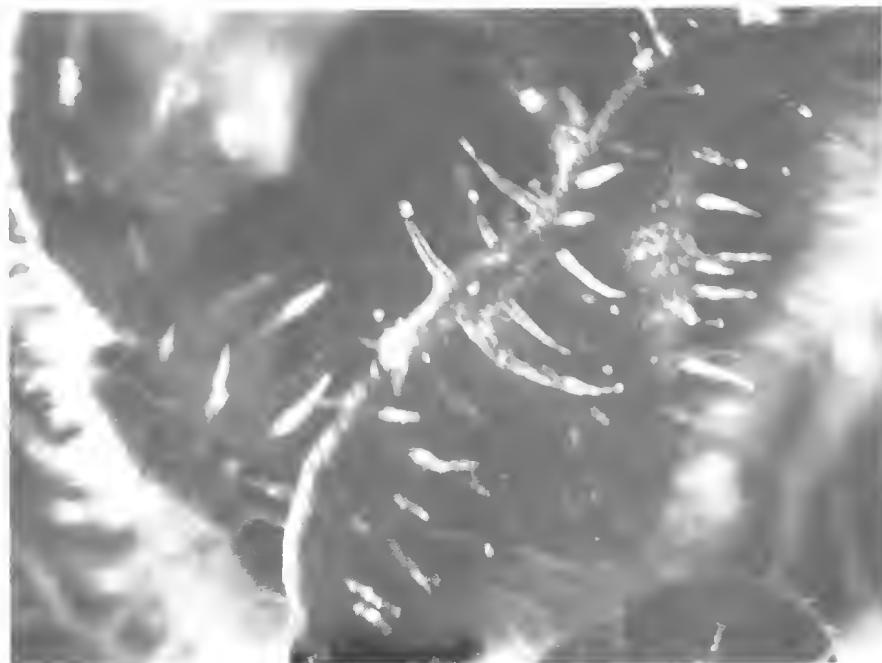


Figure 2. The hollow fluid-filled glandular leaf "hairs" are about $25\mu\text{m}$ in diameter at the base and 3-5 mm long. When squeezed, they don't squirt but slowly ooze liquid from the tip.

insects is concerned. My bibliography on the herbivore defenses of *Senecio* is an embarrassment of riches from the earliest records.)

Some cases involving exudations from roots are accepted. But, I have found only two cases where it is accepted that something in the leaves of one plant selectively inhibits the growth of other plants. One of these substances, from the leaves of *Artemisia absinthium*, is a glucoside. It is excreted from glandular hairs on the leaves. Washed off by rain, it stunts the growth of many plants for up to a metre around. And, the dead leaves virtually eliminate competing growth under the plant.

Veronica leaves contain many glucosides, and *V. filiformis* contains at least one very unusual one. And, its leaves are covered with hollow hairs which excrete droplets from their ends (Figure 2).

Well, I'll leave the tongue-twisting names and arguing to the plant physiologists. I'm content that, after all these years, scientists obviously don't know everything yet.

And, gee, those flowers are pretty!

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Unusual Forms of the Black Buckthorn (*Rhamnus frangula*) in Ottawa-Carleton

Albert W. Dugal

Botany Division

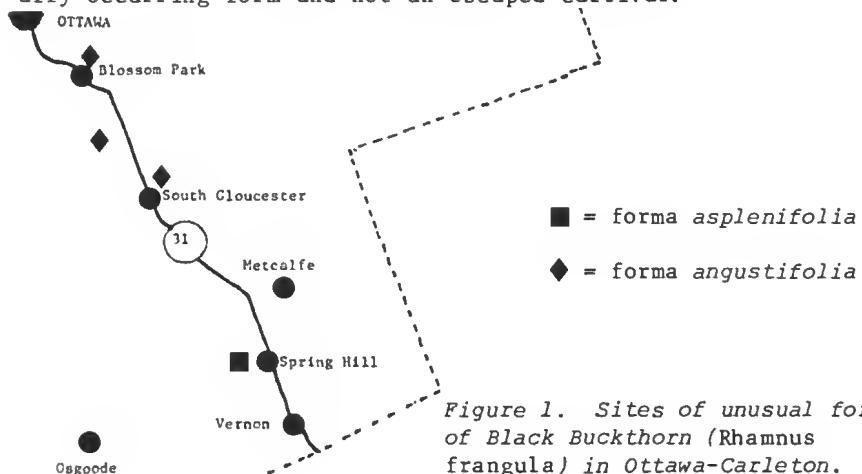
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On a beautiful June day in 1982, Mike Shchepanek and I were exploring an old bog and its surrounding aspen woodlands near Spring Hill when we encountered a most unusual small shrub with long, narrow, wavy edged leaves. We were completely baffled by this plant. It was growing on a ridge of pure peat, the result of an old, abandoned drainage project. Hoping to find another, larger specimen with either flowers or young fruit, we continued walking along the ridge. About 100 m away, we discovered a second, taller, immature shrub. This find spurred our curiosity, and after an extensive search, we found another, mature, flowering specimen approximately 150 m due east of the second plant. This shrub was about two metres high and had the characteristic flowers, bark and growth pattern of the Black Buckthorn (*Rhamnus frangula*). We collected a specimen for the National Herbarium, and a small living plant for my home arboretum.

None of the major North American floras mention this odd form of Black Buckthorn. I checked several horticultural books and discovered that in Europe there were several forms of this plant. Our specimen most closely fitted the description of the variety or forma *asplenifolia*. I presume that since this variety is neither grown in the Arboretum at the Central Experimental Farm nor listed in nursery catalogues, our specimen is a naturally occurring form and not an escaped cultivar.





normal leaves



leaves narrower
than normal



forma
angustifolia



forma
asplenifolia

Figure 2. Leaf variation
in Black Buckthorn (*Rhamnus frangula*).

In the last five years, I have found another form of Black Buckthorn at three sites in Ottawa-Carleton - South Gloucester, the Albion Road Woodlands (approximately eight kilometres south of the city limits) and the Red Pine plantation due north of Blossom Park on the Conroy Road (see Figure 1). This form or variety is called *angustifolia* and has broader leaves than *forma asplenifolia* (see Figure 2). I have also noticed in a thicket of Black Buckthorn at South Gloucester that some plants have narrower leaves than usual.

Black Buckthorn is a member of the Rhamnaceae, the Buckthorn family. It is native to Eurasia and has become naturalized in Eastern North America. Soper and Heimburer, in their *Shrubs of Ontario* (1982) describe it as being "rather local, chiefly near some of the cities in Southern Ontario". Gray's *Manual of Botany* (Fernald 1950) states that this shrub is "recently and very rapidly spreading; likely to become obnoxious". Unfortunately, this has come to pass in some places in Ottawa-Carleton where there are extensive Black Buckthorn thickets. It should be regarded as a weed.

This dense shrub or small tree, which can attain a height of six metres, is extremely hardy. It grows rapidly, has dark green, lustrous leaves and speckled bark. Black Buckthorn can tolerate a wide range of soils but does best on moister sites. Some specimens have a long blooming period - from late May to mid-September. They produce a crop of black berries that are eaten, though not avidly from my observations, by birds. These animals appear to be the main vectors of seed dispersal.

The Black Buckthorn and its forms are cultivated in Europe and North America. The *forma asplenifolia*, which apparently breeds true, is perhaps the most interesting if not the most bizarre. The specimen that I transplanted is now one metre high and is without doubt the strangest looking shrub in my arboretum. Interestingly, there was a shift in leaf colour from bright lime green to dull olive green when the plant was moved from the acidic peat to the more basic soil on my property.

Undoubtedly, there are many more sites where unusual forms of Black Buckthorn are growing in Ottawa-Carleton. One is most likely to find them in areas where there are large colonies. Perhaps on your next excursion you will find a specimen of *Rhamnus frangula* *forma angustifolia*.

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Feeding From the Clouds: Net Ombrotrophy as a Measure of the Health of Landscapes

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Despite the fact that "ecology" has replaced "conservation" as the popular description of the activities of people who try to preserve the natural world, the conservation movement has borrowed remarkably few criteria from theoretical or applied ecology for its battles with government and environmental exploiters. The arguments of conservationists for environmental health remain fragmented: aesthetic, anthropocentric or preservationist; we do not have any global measure of environmental health. If environmental concerns are to have the political importance that they deserve, we must have a measure of environmental health that politicians can use in the same way that they use measures of unemployment or interest rates. The Opposition must be able to get up in Question Period and snarl, "The Government's inaction has allowed the environmental health of the Sydenham Drainage to go down by 15 points over the last three years! Can the Minister tell this Legislature what action he is planning to reverse the damage to this biologically vital area of the Province?"

We now seem to be against everything: poisons, acid, sewage, tree-killing, intensive agriculture, highways, hunting, development, dams and drainage; everything except birdwatching and wildflower photography. The fact that we are striving for a healthy, varied World, inhabited by moderate numbers of people who consciously live as a part of the World, emotionally and economically integrated with it, and managing the other species in it for stability on a geological time scale, is lost in the negativism of reaction to environmental abuse. We need a quantitative measure for both environmental health and sickness. If the problem with the management of the World is a general unconcern with the consequences of human activities, and if we need management programs that compensate for ecological damage done by economically necessary activities, then the measure of environmental health must be sensitive to a wide range of environmental disruption, must point out the damage done by historically condoned human activities, and must have a reasonably well-defined natural value that can be compared between areas. It must be quantitative, widely applicable, and based on theoretical understanding of the functioning of ecosystems.

One measure that the conservation movement has borrowed from theoretical ecology is the stability-diversity hypothesis, the idea that ecosystems made up of more diverse species will be more stable - better able to withstand changes in its environment - and thus more desirable than less diverse communities. This may or may not be true as an ecological theory. Diversity is usually taken to mean the number of species present, though its technical meaning is the "information" gained by surveying the community - the probability that the next specimen encountered will be a different species than the last one. This is a useful criterion for comparing habitats for a single group of species, but it cannot be integrated across taxa or habitats. Vireos, violets and mushrooms will not fit into one diversity statistic, nor will an entire landscape made up of many habitats managed for different purposes.

It is my contention here that the net retention of major mineral nutrients by a drainage area is an appropriate measure of environmental health, and that it ought to be used to evaluate the success of preservation and management of terrestrial ecosystems, both as a management tool, and as a challenge to exploiters of the land.

Because of the influence of annual-based agriculture, we are accustomed to think of nutrients as belonging to the soil, whereas in fact they are held by the community as a whole, and in ecologically mature communities a large percentage of the mineral nutrients are held in living organisms. The perennial root network holds and takes up mineral nutrients as they become available in soil moisture or, in association with mycorrhizal fungi, even takes them directly from the decay of fallen litter. These root webs are most active in tropical rain forests, but at all latitudes fully developed communities are able to effect a net extraction of nutrients from rainfall, and it is this that I propose as a measure of the health of landscapes.

The ability to extract nutrients from the "distilled" water of precipitation is most spectacular where entire communities are ombrotrophic - feeding from the clouds - communities that derive their mineral nutrients solely from the minerals in rainwater with a minimum of recycling, either because minerals are deposited in accumulating organic sediments or because the plants live on the exposed surface of rock or of other plants. In most habitats, the rootless mosses and lichens, which lack structures to reach soil water, are the only regular ombrotrophs. In bogs, fens, and the epiphytic communities on the branches of rain forest trees, the paucity of soil nutrients makes rooted plants dependent on nutrients in precipitation, and it is in these habitats that vascular plants with the most extreme adaptations for nutrient collection - the fungal symbionts of orchids, the nutrient traps of insectivorous plants - come to prominence in the vegetation.

The struggle for the greater nutrient resources of ordinary soils is just as intense. The fundamental finding of the study of nutrient cycling is that, on most substrates, mature communities allow so little of the major nutrients past their root webs that there is a net removal from rain water of the fixed nitrogen that builds protein, the phosphorus that holds genetic information in nucleic acids and organic energy in adenosine triphosphate, and the potassium that balances sodium in the osmotic milieu of the cell. Since most of the outflow of nutrients is in drainage water, and the concentration of nutrients in river water and rain can easily be measured, the net flow of nutrients for the entire watershed can be expressed by a formula of percent retention (positive) or loss (negative) of the nutrients in precipitation.

Almost every sort of environmental degradation results in the loss of mineral nutrients, because of stress to the root web, deaths of organisms, the disruption of soil, or the introduction of concentrated nutrients that cannot be used by plants. Processes other than water flow which tend to export nutrients are often economically favoured (agriculture, some kinds of air pollution) or actively combatted (wild fires), and nutrients may be sequestered in sediments in lakes or wetlands, or imported by migrating animals. On the whole, however, careless agriculture, soil erosion, paving of ground, clear-cutting, acidic precipitation, high concentrations (at least) of pesticides, and organic or inorganic water pollution all result in the release of nutrients into outflow water, and it may well be that this measure of environmental health will prove to measure the synergistic effects of a diversity of pollutants and stresses, since it measures the actual failure of the community to function as a whole.

The selection of nitrogen, phosphorus and potassium is straightforward: they are the major nutrients, and are never, as calcium, magnesium, sodium, sulphur or carbonate may be, present in excess in a natural community as a result of dissolution of bedrock or loading from precipitation. They are the familiar elements of garden fertilizer, so people who relate to fixed nitrogen only as the "first number" will be able to understand the ombrrophy or nutrient retention index.

Many popular activities stand condemned by this criterion, most noteably the flush toilet and cultivation agriculture. Cultivation breaks the root web and allows nutrients to flush away under purely chemical forces until new systems develop - and the root web of an annual crop must always be an incomplete and haphazard affair compared to that of perennial plants. Even more direct than leaching is the erosion of soil into streams, which carries away nutrients bound to the finer soil particles, chokes aquatic communities and reduces their ability to use dissolved nutrients, and by reducing the size of basins and channels, increases the frequency of flooding and drought. Mo-

derate grazing or the harvesting of hay allows a perennial root web, and should be the method of choice for the feeding of agricultural animals, and all land should be zoned to prohibit cultivation near permanent or semipermanent streams. If agriculture is to be ecologically sound, it must minimize the loss of soil and nutrients. The requirement of net ombrotrophy is made more difficult by the application of fertilizers, but is mitigated by the removal of nutrients in crops.

These same nutrients removed from one community by agriculture are flushed back into the same or another watershed as sewage, usually far downstream of the point where they were removed from the landscape. The conventional methods of treating sewage are designed solely to deal hygienically with human pathogens, and take no notice of the nutrient content of the wastes, except in cases where grossly excessive phosphorus would cause offensive algal blooms. The septic tank is no better than communal sewage treatment: nutrients are flushed into the ground water and lost to the ecosystem.

Nutrients that are not flushed into rivers or groundwater may be buried in landfills, burned in incinerators or dumped into the sea. There is no conventional Western method of disposing of any kind of human waste or refuse that redisperses nutrients back onto the land except some forms of particulate or nitrogen oxide air pollution. Even in these northern and temperate latitudes, our culture sucks the life-building nutrients out of the land, and puts fertilizers made from non-renewable minerals only onto agricultural land, from which they in turn are eroded or leached from the soil.

The richest and most advanced human cultures have always grown up in conditions of high nutrient flow - along the grinding glacial rockmills of the ice age, on the floodplains of silt-bearing rivers, at the centres of systems of imperial tribute, at the eroding edge of ecosystem-breaking frontiers, or, most recently, dependent on artificially fixed nitrogen and limited geological reserves of phosphorus and potassium. Now that there are so many of us, and we have occupied the entire planet, we must abandon this one-way flow of nutrients, which can now only deplete and impoverish the World and ourselves, and establish ecosystems with a high flux of long-retained nutrients that cycle through organisms many times before they make their way to the sea. □

Book Review: *Nature and Natural Areas in Canada's Capital*

by Daniel F. Brunton. 1988. *The Ottawa Citizen* in cooperation with The Ottawa Field-Naturalists' Club, Ottawa, Ontario. 208 pages. \$9.95.

As a new resident of the Ottawa region I found *Nature and Natural Areas in Canada's Capital* to be a welcome introduction. Previously, no general natural history guidebook for the Capital region existed. Paddy Sherman, president of the Southam Newspaper Group, recognized the need for one and championed the idea of producing it. With important input from The Ottawa Field-Naturalists the concept of the book was set and Dan Brunton began to write it.

The end result is a simple overview of the natural history in Canada's Capital Region (Ottawa and the area surrounding it, a 100 km diameter circle of land), examining the life found in a range of habitats from backyards and farmland to less altered parks and conservation areas.

The guide is aimed at a wide audience including beginning naturalists and all those interested in the life around them. Although the science may be elementary for the experienced naturalist, the guide provides an informative overview of the natural areas available for exploration in our vicinity.

The diverse natural systems of the region have been divided into seven broad categories or "habitats" in the guide: (1) upland forest, (2) meadows and barrens, (3) farm and country, (4) urban landscape, (5) forested wetland, (6) open wetland, (7) lakes and rivers. Coverage of each of these habitats includes a general introduction and description, a list of example sites to visit, and species accounts (diagrams and brief field notes) of the most characteristic wildlife found there.

Readers can refer to the "Places to See" section for more detailed information on recommended sites. Here, 30 sites are described, including details of natural features, location, accessibility (wheel chair access noted), equipment required and "seasonal events". A small map is included with each description and the regional map inside the book's back flap shows their general locations. In most cases, a reference for more information on the site, or some feature of it, is included.

The "Further Information" section of the book is a very important one. Here local organizations are introduced, and relevant (and necessary) literature sources are cited. "Do's And Don'ts" gives practical tips to novice field naturalists, and "Development of the Landscape" discusses this area's geolo-

gical history.

Does the guide adequately explain a given system? To answer this question, I scrutinized the guide's treatment of one community I am quite familiar with. Alvar meadows of the "Meadows and Barrens" habitat are introduced with a brief description and a limited number of plant and animal species are described. Readers are directed to the best alvars of the region. The corresponding site descriptions are comprehensive except that, of the few key species mentioned, none is described in the habitats text.

Overall, this concise guide is an excellent introduction to the Capital's natural features. Dan Brunton's style is light and easy to read, sometimes using helpful similes as in comparing the drumming sounds of the male Ruffed Grouse to "a rubber ball falling on a hardwood floor". Species accounts include clear diagrams and brief notes on appearance, specific location and seasonal information. However, no approximate heights or lengths are included and these descriptions are not adequate for species identification. Furthermore, the broad scope of the book requires that each habitat section includes minimal information. Therefore, field guides are an absolute must for the enthusiastic naturalist. At the same time this overview treatment has the advantage that beginning naturalists will not be discouraged by an overwhelming amount of information. The additional information section, as mentioned, does provide a good list of pertinent literature, including field guides, along with the organizations that can be contacted.

I hope that this book will be popular and that eventually an updated edition will be printed. In that event, I have a couple of suggestions for improvement. Firstly, since geology influences vegetation (and wildlife) to such a great extent, the geological information could be expanded to include a geological map of the region. Secondly, the topic of conservation should receive some attention. Another regional map to show protected lands and their status would be instructive. Including some references to conservation issues might aid the quest for public awareness.

As it is, *Nature* is bound to encourage would-be naturalists to see and appreciate the life around them, while introducing all of its readers to the natural history of the National Capital Region. I suggest that all newcomers to this region receive a copy - perhaps the Welcome Wagon could take on that responsibility.

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Albino Garter Snakes Again

Brian, Sylvie and Nicholas Coad

On September 6, 1986, Nicholas caught an albino Eastern Garter Snake (*Thamnophis sirtalis sirtalis*) in a field east of Copeland Park between Clyde Avenue and Merivale Road, Ottawa (Trail & Landscape 21(2): 80-81 (1987)). Regular forays since then failed to discover any more albinos until August 19, 1988, when Sylvie found one within a few metres of the original discovery. This individual weighed 2.2 g and was about 205 mm total length on the day after capture, these figures being comparable to the original albino and young-of-the-year normal garter snakes from the region. On September 10, 1988, Brian found another albino in the same locality, this one measuring about 250 mm and weighing 5.6 g. It was similar to the others but larger with the yellow pigment more obvious and more widespread on the body. The specimens are being maintained alive at the Herpetology Section, National Museum of Natural Sciences and are catalogued as 31336 and 31535 respectively. As of this writing (October 1988), they are accepting food and it is hoped will survive longer than their predecessor.

The new albinos conform to the original in their pigment pattern, being a partial albino retaining yellow pigment but being generally white with red eyes. Albinism is, then, still extant in the population, but we have no measure of its frequency.

The area where we hunt snakes is a transition between woods and open fields. Large adult snakes can be seen in the woods in spring before the trees are in leaf. Most juvenile snakes are found by turning over rocks at the edge of the woods. Here there are numerous impenetrable bushes interspersed with open grass patches and bare bedrock. The flat rocks lie on bare soil, on bedrock, on grass or even squashing low bushes. Every rock is turned many times by the boys in the neighbourhood throughout the summer.

Despite this continual disturbance, young snakes can be found throughout the warmer months, peaking in early spring and late summer to fall when, perhaps, the rocks retain some heat in the cool evenings after a sunny day. Rocks vary in maximum length from 12 to 74 cm, mean 32 cm (sample size 249 rocks). Rocks larger than this are few and too heavy for us to turn over. Up to four snakes can be found under each rock, usually Garter Snakes but also, more rarely, Redbelly Snakes (*Storeria occipitomaculata*). Both Garter and Redbelly Snakes can be found under the same rock. On a good day, snakes can be found at the rate of one a minute. On September 10, we caught 26 in half an hour, only one of which was a Redbelly. Rock size does not seem

to affect the number of snakes to be found, and the albinos were found under rocks less than 20 cm in length.

A small albino Garter Snake was also caught near the La-flèche Cavern north of Hull, Quebec, in March 1988 by P.M. Youngman. This, too, had yellow pigmentation but was otherwise white with red eyes. The specimen would not feed and was released at the capture site.

Albinos are still a rarity despite these fresh discoveries; the four reported here represent 17% of the records for North America.

Our snake hunting trips have been aided by the children and some of the parents of the Richardson, Lloyd, Holy, Simard and Seguin families. □

Le service téléphonique du Club des ornithologues de l'Outaouais 778-0737

Daniel St-Hilaire

Depuis maintenant trois ans, le Club des ornithologues de l'Outaouais offre un service téléphonique en français sous forme d'un message enregistré (l'équivalent de la "Bird Status Line" du Ottawa Field-Naturalists' Club) et d'un répondeur téléphonique pour prendre les messages. Ce service s'adresse à toute personne qui s'intéresse à l'observation des oiseaux, qu'elle soit membre du Club ou non, et qu'elle demeure dans la région ou non.

Le message enregistré (778-0737) est conçu pour satisfaire les différents types d'observateurs. Il rejoindra sans doute à prime abord l'ornithologue expérimenté, celui ou celle qui n'hésitera pas à se déplacer sur de longues distances pour ajouter une espèce rare à sa liste, ou qui ne veut manquer aucun oiseau rare de passage dans la région. Cependant, le message plaira aussi aux personnes qui, à défaut de chercher les oiseaux rares, veulent simplement savoir quelles sont les espèces typiques de la région ou de la saison, ou encore connaître les prochaines activités du Club.

Le message, qui est mis à jour une ou deux fois par semaine, rapporte d'abord les espèces peu fréquentes observées récemment dans l'Outaouais québécois et donne des indications précises pour les retrouver. A défaut, on donnera les espèces de passage à ce temps de l'année dans la région. On rapporte ensuite les raretés vues du côté ontarien de la région de la Capitale nationale et quelquefois, en supplément, les raretés enregistrées à l'échelle du Québec (une chaîne téléphonique à l'échelle provinciale, opérée par l'Association québécoise des groupes d'ornithologues, sera en fonction d'ici peu). Enfin, on indique toujours quelles sont les prochaines activités et excursions du Club; il est à noter que ces excursions sont ouvertes au grand public, et non pas réservées aux seuls membres du Club.

Il est évident que la qualité de ce message téléphonique repose sur la collaboration des ornithologues actifs qui l'alimentent de leurs observations. Nous invitons donc les ornithologues francophones à contacter le responsable de ce service (Daniel St-Hilaire, 776-3822) pour lui faire part de toute observation intéressante; c'est toute la communauté ornithologique qui pourra en profiter. Le responsable pourra aussi vous fournir toute l'information pertinente sur les oiseaux de la région et sur le Club des ornithologues de l'Outaouais. En son absence, un répondeur pourra recevoir votre message.

En conclusion, les membres du Ottawa Field-Naturalists' Club qui maîtrisent la langue française ont une occasion supplémentaire d'augmenter leurs activités ornithologiques régionales, grâce non seulement aux informations du message téléphonique mais aussi à la possibilité qui leur est offerte de participer à des excursions ornithologiques en français. □

“Shooting” the Hunters in Shirleys Bay

Shaun McLaughlin

Most birders in the Ottawa area likely visit Shirleys Bay several times a year to view the large variety of migrating shorebirds and waterfowl. Both the lagoon and open bay are important migratory resting and feeding spots. I have always had a special fondness for the place due to its "wilderness close to the city" aspect. I also found that when the area is threatened in any way, I get protective.

Late in October 1988, I was birding with a friend along the dike at Shirleys Bay. I was surprised to find three boats of duck hunters anchored in the bay. These were serious hunters with decoys and camouflaged boats. (I later checked my map - all three were within Nepean boundaries. None was in Quebec or the next township.)

I watched one boat (anchored off the first island) through my telescope. There were two men, drinking beer and tossing bottles into the water. A flock of Black-bellied Plovers flew past the boat. Both men fired two rounds each from their shot-guns. I saw one bird fall. My friend saw two.

I shouted at them in rather rough English. They just grinned back. I continued bird watching and they headed back to the boat launch at the foot of Range Road. When I got back to my car, there was a note on the windshield: "Next time we'll shoot you, you asshole".

I reported this to the Nepean police. Sgt. Mel Robertson of the Criminal Investigation Division began an investigation. He agreed that there were at least two charges possible here: firing a weapon within city limits and uttering a threat. I gave him the boat registration number, the note and a description of the car. I also sent an account of the incident to Mayor Franklin of Nepean and asked for stronger police presence in the area in hunting season.

As of mid-May 1989, one of the boat occupants has been identified and is facing two charges. Also, the City of Nepean has erected "No Discharge of Firearms" signs at Shirleys Bay.

I give credit to the Nepean Mayor and Police, but I intend to take further action and hope a few other birders and naturalists might join in. On weekends this October, I plan to do a lot of birding at Shirleys Bay and I plan to take my camera with the longest lens I have. If I can't persuade people not to hunt, I will gather evidence.

For those who want to join in this "camera patrol", the police need certain types of evidence: boat numbers, licence plate numbers (very helpful), facial shots of hunters in their boats, and lots of detailed notes. Most importantly, you must be able to identify the hunter later - if you can't get a good photo, try to retain a good mental image.

As individuals, we can't solve world environmental problems, but we can lessen local problems. *Think globally, act locally.* ■

What a Difference a Year Makes

Christine Hanrahan

It was Thomas Wolfe who said "you can't go home again", and he may have been right. When I returned to Ottawa last year for a visit after a year's absence, I didn't anticipate many changes; after all, a year is a relatively short period of time - or so I thought. In reality, it seemed that too many of the areas I visited had been, or were being, irreversibly altered. The following is a brief and personal view of some of the changes I encountered.

Wanting to check out Loggerhead Shrikes, I visited six sites that in 1987 had either breeding birds or single sightings. Three of the sites sustained changes: one held a newly constructed house; another had a series of Hydro transformers bisecting the habitat; and a third was being sold for a potential subdivision. This latter was particularly upsetting since the land had remained undisturbed for decades, and seemed likely to remain so. On the bright side, I found shrikes breeding in two locations. Both sites were just outside the Ottawa District and were on isolated back roads. In 1987, shrikes bred successfully in these same two locations.

Possibly one of the most shocking changes was the destruction of prime habitat in the Kanata area along Richardson Side Road and Goulbourn Forced Road. Most of us have known for years that the land was to be developed but probably hoped that fate would intervene and save it. During the Breeding Bird Atlas project over 120 species were found here including Barred and Saw-whet Owls and Cooper's Hawk. Now the area is falling fast to the chainsaw and the bulldozer.

Most of the land along the Thomas Dolan Parkway - Golden-winged Warbler and Rufous-sided Towhee habitat - is for sale. Already a house stands opposite the Golden-winged Warbler site. Further south towards the Smiths Falls area, land long left undisturbed is now for sale. Subdivision mania seems to be everywhere. There were, of course, a half dozen other spots undergoing development, and presumably many more which I, in my limited time, couldn't get to. The above sites particularly struck me, however.

If all this change can occur in one year, what will happen in a decade? Think about it. It is frightening. If the urge to gobble up yet more green space persists, Ottawa will lose what makes it so unique - liveability. And it is the city's smallness combined with such easy and rapid access to so much green space that makes Ottawa liveable. Seeing Ottawa with the new perspective that distance lends was not reassuring. ▀

Two Bird Notes of the Year 1988

Audrey Buckingham

In the spring I was in Victoria, B.C., and, equipped with my binoculars and western bird books, I wanted to add a few new species to my life list.

Each morning, the window wide open to the glorious soft spring air, I was awakened by the most unusual sound - undoubtedly birdlike - but what was it? Unlike Ottawa where we have the most expert and helpful birders one can call, there I knew no one who could help me.

On Good Friday morning, the CBC had a cross country link up, and it so happened that I was listening when Monty Brigham was interviewed on his remarkable recordings of bird song. He gave four examples of Canadian birds: the Common Tern for the Maritimes, the Common Loon for Ontario, the Western Meadowlark for the Prairies and, lo and behold, for the West Coast the very song I had been hearing each morning - the Varied Thrush!! Thank you, Monty.

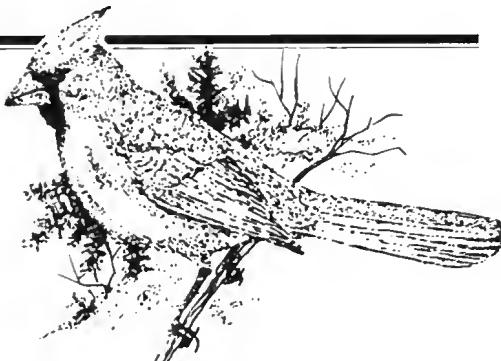
* * *

In August we were lucky to escape with only a few broken limbs when the thunderstorm acting like a tornado caused such devastation to the trees at the corner of Island Park Drive, Ruskin and Harmer Avenues here in Ottawa. We were waiting for the tree surgeon to come and tidy up our big maple, extricate fallen branches from our evergreens and remove debris from the overhead wires servicing our house.

Balanced on our power line was an angle-shaped branch 3 cm through and 2 m long. It remained there until one day when I was breakfasting in our sunroom I saw a Black-capped Chickadee land on one end of the stick, forcing that end to drop. So the little bird flew to the other end, then in seesaw fashion he hopped back and forth several times till he tipped his perch upright and down it came!

Believe it or not - I witnessed it! ☐

Winter Bird Sightings



V. Bernard Ladouceur and
Bruce M. Di Labio

December 1988 - February 1989 Period

Many birders would have described the winter of 1988-89 as "very quiet" or used expressions such as "low numbers" or "few birds". This isn't quite accurate, although it would apply in a few cases. For most regularly occurring species, numbers were not low at all. The total number of species recorded was only a little below average. What was lacking was the presence of a "mega-rarity" (to use an old term) or an incursion or irruption of some usually much scarcer species. What was lacking was the SPICE.

There was very little spice.

A description follows ... and we'll save the spice for last
...

BIRDING THE RIVER (including species more easily found at the dump)

The first week of December was mild and, therefore, somewhat interesting. Lingering species included Common Loon, Great Blue Heron, American Wigeon, Greater Scaup, Ring-necked Duck, Bufflehead and Oldsquaw.

An adult Bald Eagle was at Shirleys Bay from December 3rd to 5th. As many as 200 Canada Geese could be found there in early January. Single Northern Pintail, American Wood Duck, Lesser Scaup and Hooded Merganser were present throughout the period - two or more of each of these species could be found the first week of December. Common Goldeneye numbers stabilized at about 350, while as many as five Barrow's Goldeneyes could be seen between Remic Rapids and Deschênes Rapids. The Greater White-fronted Goose discovered in early October was last reported on December 3rd along Cedarview Road near the log farm. The three American Coots present at Shirleys Bay in early December were whittled down to zero by January 1st, almost certainly by raptors. A Pied-billed Grebe overwintered on the Mississippi

River at Appleton.

Lesser Black-backed Gull was last reported on December 1st. Thayer's and Ring-billed Gulls lingered into the latter part of December, while Glaucous, Iceland, Great Black-backed and Herring Gull were present into January.

Thaws in late January and in February usually prompt some ducks and gulls to move north again to Ottawa, but that wasn't the case this year, except for two adult Ring-billed Gulls observed on February 1st at Bate Island. It should also be noted that the Ottawa region is not birded nearly as heavily as it once was.

RAPTORS

All three accipiters were present in very small numbers. Buteos were virtually absent. American Kestrel and Northern Shrike numbers were well below average. Of greater interest was a Northern Harrier seen south of the airport in February, possibly an early migrant.

A few Snowy Owls wintered in the region. A Northern Saw-whet Owl was present for most of the period behind Shirleys Bay near the intersection of the Fourth Line and Riddell Drive. All three of the locally rare northern owls were recorded (see later in the article).

AN OTTAWA SPECIALTY

Gray Partridge was again scarce this winter.

FEEDERS

Numbers were low here too - few juncos, White-throated Sparrows or Song Sparrows. There were very few overwintering blackbirds reported. A late Northern Oriole was observed on December 3rd, and an Oregon race individual of the Dark-eyed Junco overwintered at an east end feeder.

FINCHES

Evening Grosbeak numbers were the lowest in recent memory, especially at feeders. Purple Finch and Pine Siskin numbers built steadily throughout the winter. Common Redpolls were scarce. Pine Grosbeaks were completely absent. Scattered flocks of White-winged Crossbills as well as a few Red Crossbills were reported throughout the period, typical of the last several winters. House Finch numbers continue to increase.

The mid-winter House Finch survey yield 137 at local feeders.

OTHER ODDS AND ENDS

No Boreal Chickadees were reported. Bohemian Waxwings were virtually absent, while a few Cedar Waxwings could be found. This is a reverse of the norm. From our experience, Cedar Waxwings and Purple Finch numbers seem to be highest during "off" (that is, boring) winters.

Snow Buntings could be found in average numbers, and at times they were joined by fewer numbers of Horned Lark and the occasional Lapland Longspur.

SPICE

Ottawa's fifth Varied Thrush in three years wintered along Promenade du Lac des Feés. Calling Varied Thrush a winter vagrant is overstating the fact that it winters in very small numbers in central Canada and the northeastern United States. Two Carolina Wrens attempted to winter here. One bird at Osgoode probably perished during the cold spell in early March, while another reported from the Glebe and adjacent neighbourhoods was seen only sporadically. A Northern Mockingbird spent its second winter between Agincourt Drive and the bike path of Maitland Avenue. A Red-bellied Woodpecker spent the winter in the vicinity of Huntmar and Old Carp Roads - when it wasn't in the twilight zone. It wasn't always easy to find. Red-bellied Woodpeckers seem to be at least semiannual.

A Northern Hawk-Owl was discovered near Highway 7 and Dwyer Hill Road on January 21st and delighted many an American (and Canadian) birder after that date. This is another species that is almost annual.

Two Great Gray Owls were observed. One was hit by a car in December and later died. Another was found near Breckenridge on January 21st. It wasn't seen again until March. There were other unconfirmed reports of Great Gray Owls in the District. On December 1st, a Boreal Owl was hit by a car and later released in Nepean. Another Boreal Owl was seen near the intersection of Fourth Line and Riddell Roads on January 8th, 12th, 28th and 30th. Now, there's a switch - a Great Gray Owl that eludes birders for nearly two months and a "gettable" Boreal Owl.

Two adult Peregrine Falcons overwintered. One was the *tundrius* (arctic) race - certainly the same bird that was the first peregrine ever to winter in Ottawa, last year. The other was apparently the *anatum* race, the race that once ranged the

continent and was subsequently nearly extirpated. The Peregrine Falcon Release Project in Canada has released birds of this race, but it should be noted that there were no leg bands on the bird in question. (The U.S. release program uses the "melting pot" approach, releasing various peregrine races, even birds from Spain.)

On the Ottawa-Hull Christmas Bird Census on December 18th, an immature Black-legged Kittiwake was found on the Ottawa River behind the Parliament Buildings and a subadult Golden Eagle was seen over Aylmer.

Two areas in the extreme northwest of the District provided some of the winter's most interesting birding. On late January, two Gray Jays and an adult Golden Eagle were discovered along the Eardley - Masham Road in Gatineau Park. The Gray Jays could have been breeding, considering that a juvenal was found at exactly the same location two summers earlier. A Three-toed Woodpecker was seen three times during the winter at another location along the same road.

A burnt area north of Quyon, adjacent to the western edge of Gatineau Park, was host to many woodpeckers including numerous Hairy, perhaps as many as 11 Black-backed, at least two Pileated, a very few Downy, and one occasionally observed Three-toed. The Three-toed Woodpecker seemed more interested in the slightly singed spruce trees on the Gatineau Park side of the road.

Spicy enough?

Acknowledgements: This article is based on the log book of the Club's Bird Status Line maintained by Larry Neily, the bird column in *The Ottawa Citizen*, and our own observations. ▀

Shorebird Watching at Manure Piles

Bruce M. Di Labio

Most birders know that manure piles are suitable winter spots to observe Snow Buntings, Lapland Longspurs, Horned Larks, overwintering blackbirds, and Gray Partridge. They can also be productive for observing shorebirds in other seasons.

In eastern Ontario we have an abundance of sewage lagoons, and, with the Ottawa and St. Lawrence Rivers at hand, the opportunities for shorebird watching are superior. During the years



Ruddy Turnstone and Killdeer (inset), two shorebirds at the Central Experimental Farm manure pile. Photographed by the author on August 6, 1986.

1985 - 1987, regular checks during the summer and fall at a manure pile at the end of Ash Lane in the Central Experimental Farm also yielded interesting results. Because this manure pile is now on a cement base, the liquid wastes do not seep into the ground but instead formed a large shallow pool suitable for feeding.

At first, Least Sandpipers, Solitary Sandpipers and Lesser Yellowlegs were observed in small numbers. As the number of visits increased, other interesting species were observed, including Semipalmated Plover, Pectoral Sandpiper, Baird's Sandpiper, Sanderling and Ruddy Turnstone.

With the higher number of shorebirds migrating south during the fall (both adults and juveniles), these sites are bound to attract hungry travellers. For all those birders unfortunate enough not to have a local sewage lagoon, manure piles can be a worthwhile alternative. □

A Site Guide to the Embrun Sewage Lagoon

Bruce M. Di Labio

For all those who enjoy birding sewage lagoons, a new one has been located near the town of Embrun in Russell County. It appears to have gone unnoticed by Ottawa Field-Naturalists' Club birders for the past five years or so, even during the Ontario Breeding Bird Atlas Project (1981-1985)!

I wasn't aware of it until Richard Brouillet informed me that he had found a sewage lagoon that wasn't on his topographic map. He found it while looking for the Russell sewage lagoon. The Embrun sewage lagoon is the largest active lagoon in the Ottawa District*. It consists of six large ponds, one of which has cattails growing in it, possibly making it a good pond for breeding Ruddy Ducks. The adjacent fields are mostly farmland, as are the fields near the Russell and Casselman sewage lagoons. Since its discovery during the fall of 1987, a total of 30 species of shorebirds has been found, including Piping Plover, Whimbrel, Hudsonian and Marbled Godwits, Ruff and Long-billed Dowitcher, to name a few. In addition, Wilson's Phalarope has been found breeding there.

To reach the lagoon from Ottawa, travel east on Highway 417. At exit 79 (Limoges, Chrysler), turn right (south) on to County Road 5 (Limoges Road). Drive 2.4 km until you reach County Road 3 (Notre Dame Street). Turn right (west) and drive 3.2 km to St. Joseph Street. Turn left (south) and continue driving for 1.2 km until you reach Route 400. At Route 400, turn left (east) and drive about 0.6 km. You will see the lagoon mounds on your left. Remember, do not park in front of the gates because you will block the access for the maintenance crew.

Like any lagoon, the water level is a contributing factor to your success. If the water level is high, very few shorebirds will stop over, but, if the water level is low, mudflats will be exposed and, thus, shorebirds will have a place to feed or rest.

Besides shorebirds, lagoon ponds play host to many other species of birds. The best way to find out is to go and have a look.

* The Ottawa District is the area within 50 km of the Peace Tower, Ottawa. □

Activities of the Bird Records Subcommittee in 1988

Gordon Pringle

The Bird Records Subcommittee solicits reports, photographs or recordings that document any species not on *A Birder's Checklist of Ottawa* (1985), that has fewer than five records or that has not been sighted for 10 years. Observations in a week not recorded on the checklist are also of interest. Checklists are available from the Club or the Nature Canada Bookstore. Report forms are available from Gordon Pringle (224-0543). If you want help in preparing a report, or if you are unsure that a report is needed, contact any member of the subcommittee (page 107).

The subcommittee considered 21 reports in 1988 and the following were found to be significant additions to the data presented in the checklist.

Sandhill Cranes	3/10/87	Navan, mated pair	G. Pringle
Orchard Oriole	6/9/87	Gloucester	P. Martin
Orchard Oriole	14/6/87	Innis Point, banded, photograph	J. Dean W. Petrie
Varied Thrush	23/11/87	Rockcliffe	R. Holland
T. Solitaire	8/11/87	Irving Place, Ott., photograph	T. Dean
Ovenbird	3/12/87	Glou., photograph	R. Holland
Franklin's Gull	18/6/87	Britannia	R. Holland
Eurasian Wigeon	19/4/87	Shirleys Bay	B. Ladouceur
Le Conte's Sparrow	7, 19/6/87	Hallville	R. Bracken
California Gull	15/10/88	Nepean Dump	St. Gawn
Buff-b. Sandpiper	3/9/88	Quyon	T. Beck
Prairie Warbler	14/5/88	Vincent Massey Pk.	J. Harrison
Yellow-rumped			
"Audubon's" W.	20/12/87	Vanier	B. Ladouceur
Eurasian Wigeon	11/9/88	Britannia	T. Beck
Pectoral Sandpiper	28/3/86	Bourget	R. Bracken
Gr. W-f. Goose	29/10/88	Cedarview Rd.	L. Neily

The following reports have been received but have not yet been brought before the subcommittee. They are mostly documentation required for the last Christmas Bird Count.

Peregrine Falcon (<i>tundrius</i> ?)	20/12/87	Coats Building	M. Gawn
Golden Eagle	18/12/88	Cook Rd.	T. Beck
Great Blue Heron	18/12/88	Sawmill Creek	R. Brouillet
Peregrine Falcon	18/12/88	Lemieux Island	R. Brouillet
B.-l. Kittiwake	18/12/88	Parliament Bldgs.	R. Brouillet
Hermit Thrush	18/12/88	Lac Leamy	D. St-Hilaire

The following reports were filed with the intention to either seek additional details or the advice of outside expertise.

Long-tailed Jaeger	18/6/87	Bate Island
Worm-eating Warbler	15/5/87	Britannia
Yellow-headed Blackbird	5/7/88	Connaught Range
Marbled Godwit	31/5/87	Embrun, photograph
Western Kingbird	12/5/88	Arboretum

The following sightings were reported for 1988 in *Trail & Landscape*, in *The Ottawa Citizen* or to the Club's Bird Status Line. No documentation has been received by the subcommittee.

Greater White-fronted Geese	26/3;8/5/88	Bear Brook
Greater White-fronted Goose	4/4/88	Bourget
Gyrfalcon	?/2/88	Albion & High Rds.
Piping Plover	1/7/88	Embrun
Baird's Sandpiper	?/6/88	Brébeuf Park
Dunlin	23/6/88	Embrun
Ruff	3,4/7/88	Embrun
Thayer's Gull	3,7,17/7/88	Deschênes Rapids
Lesser Black-backed Gull	25,26/6/88 17/7/88	Deschênes Rapids
Forster's Tern	?/9/88	
Purple Martin	28/3/88	
Winter Wren	25/12/87	Britannia
Prairie Warbler	31/5/88	Metcalfe
Prothonotary Warbler	?/9/88	Constance Bay
Connecticut Warbler	30/5/88	Kinburn
Connecticut Warbler	?/9/88	Britannia
Swamp Sparrow	31/1/88	Carp
Yellow-headed Blackbird	29/5/88	Russell Lagoon
Yellow-headed Blackbird	11/6/88	Bankfield Rd.
Common Redpoll	16/9/88	

□



"woodcuts" by Ross Anderson

The Ottawa Valley Fall Roundup

1988

Daniel Perrier

Last year the Ottawa Valley Fall Roundup was held on August 28th, the Sunday before the Labour Day Weekend. Twenty-five field observers and many feeder watchers observed a total of 166 species. In the two previous years, the Roundup was held on the Labour Day weekend; 175 species were found in 1986 by 42 participants, and 173 species in 1987 by 29 participants.

On the 28th, rain ended early in the morning as a light southerly breeze gave us hope for a large grounding of land and shore birds. Such was not the case, however. I personally have never walked so far for a meager 75 species. To put it another way, it took my group eight hours to see our first Rock Dove.

Fortunately, others fared better. In the Northwest, 126 species were seen, while the Southwest recorded 127 species. It should be noted that not only fewer species were observed but also the number of individual birds observed was fewer than in other years.

Rarities were few and far between. The highlights included two Buff-breasted Sandpipers (along Greenbank Road), one Lesser Black-backed Gull (at Deschênes Rapids), two Caspian Terns and one Red-bellied Woodpecker.

Northern Cardinals and House Finches were the dominant birds reported from the feeders.

I would like to thank the four sector leaders, Gordon Pringle, Daniel St-Hilaire, Bernie Ladouceur and Jim Harris for their good work.

This year, the Ottawa Valley Fall Roundup will be held on Sunday, August 27th. Contact the compiler, Daniel Perrier, at 746-6716 if you wish to participate.

Ottawa Valley Fall Roundup Results

<u>Species</u>	<u>SW</u>	<u>SE</u>	<u>NW</u>	<u>NE</u>	<u>Total</u>
Common Loon	1		4	1	6
Pied-billed Grebe	4	8		5	17
Double-crested Cormorant	38	2	60		100

<u>Species</u>	<u>SW</u>	<u>SE</u>	<u>NW</u>	<u>NE</u>	<u>Total</u>
American Bittern	1	1	1	1	4
Great Blue Heron	27	14	22	9	72
Green-backed Heron	2		4	1	7
Black-crowned Night-Heron	6	1			7
Canada Goose	16	20	9		45
Wood Duck	259	11	14	5	289
Green-winged Teal	29	37		12	581
American Black Duck	392	131	38	20	78
Mallard	863	554	23	20	1,460
Northern Pintail	12				12
Blue-winged Teal	235	153	47		435
Northern Shoveler	7	7			14
Gadwall	12	2			14
American Wigeon	41	5			46
Redhead		5			5
Ring-necked Duck		6			6
Greater Scaup		5			5
Lesser Scaup	2	1	2		5
Common Goldeneye		1			1
Hooded Merganser		12			12
Common Merganser	17		31		48
Ruddy Duck		10			10
Turkey Vulture			3		3
Osprey	2		3		5
Northern Harrier	2	4	2		8
Sharp-shinned Hawk	2	1	4	2	9
Cooper's Hawk		1	3		4
Red-shouldered Hawk			1		1
Broad-winged Hawk			2		2
Red-tailed Hawk	2	2	6	1	11
American Kestrel	8	7	47	9	71
Merlin	1	1			2
Peregrine Falcon	1				1
Ruffed Grouse			1	1	2
Virginia Rail		1	1		2
Sora		2			2
Common Moorhen		8		1	9
American Coot		15			15
Black-bellied Plover	2				2
Lesser Golden Plover	35				35
Semipalmated Plover	11	20	1		32
Killdeer	38	31	71	15	155

<u>Species</u>	<u>SW</u>	<u>SE</u>	<u>NW</u>	<u>NE</u>	<u>Total</u>
Greater Yellowlegs	5	1			6
Lesser Yellowlegs	87	41			128
Solitary Sandpiper	2	1	4		7
Spotted Sandpiper	19	24	9	1	53
Ruddy Turnstone	4				4
Semipalmated Sandpiper	115	20		4	139
Least Sandpiper	27	24			51
Pectoral Sandpiper	8	2			10
Stilt Sandpiper	6	3			9
Buff-breasted Sandpiper	2				2
Short-billed Dowitcher		4			4
Common Snipe	2	1	2	3	8
Bonaparte's Gull	11		7		18
Ring-billed Gull	2,425	174	346	103	3,048
Herring Gull	5,103	15	571		5,689
Lesser Black-backed Gull			1		1
Great Black-backed Gull	2		4		6
Caspian Tern		2			2
Rock Dove	116	159	72	18	365
Mourning Dove	29	48	62	7	146
Black-billed Cuckoo			2		2
Eastern Screech-Owl		2			2
Great Horned Owl		3	1		4
Common Nighthawk	2		70		72
Whip-poor-will			1		1
Chimney Swift	122	2	182		306
Ruby-throated Hummingbird		4	25	4	33
Belted Kingfisher	14	5	6		25
Red-headed Woodpecker			1		1
Red-bellied Woodpecker			1		1
Downy Woodpecker	6	6	29	5	46
Hairy Woodpecker	2	2	10	5	19
Northern Flicker	24	31	54	3	112
Pileated Woodpecker	1	2	2		5
Olive-sided Flycatcher	1		2		3
Eastern Wood-Pewee	6	4	59	1	70
Yellow-bellied Flycatcher	1				1
Alder Flycatcher	1		1		2
Least Flycatcher	9		12	2	23
Eastern Phoebe	6	1	39	3	49
Great Crested Flycatcher	1	1	15	1	18
Eastern Kingbird	14	81	65	16	176

<u>Species</u>	<u>SW</u>	<u>SE</u>	<u>NW</u>	<u>NE</u>	<u>Total</u>
Horned Lark	7	6	1		14
Purple Martin	128	7	146	44	325
Tree Swallow	4,720	6,222	926	3	11,871
N. Rough-wing Swallow	5		1		6
Bank Swallow	49	910	125		1,084
Cliff Swallow	33	425	76		534
Barn Swallow	415	255	127	27	824
Blue Jay	58	21	63	21	163
American Crow	129	122	162	55	468
Common Raven			2	1	3
Black-capped Chickadee	122	65	279	56	522
Red-breasted Nuthatch	3	1	23	8	35
White-breasted Nuthatch	7	2	38	7	54
Brown Creeper	2	1	19		22
House Wren			5		5
Winter Wren			4		4
Marsh Wren		2			2
Golden-crowned Kinglet		4	1	2	7
Ruby-crowned Kinglet	5	1	4		10
Eastern Bluebird	6		17	11	34
Veery	2	2	12	9	25
Gray-cheeked Thrush			1		1
Swainson's Thrush	8		25	2	35
Hermit Thrush			1		1
Wood Thrush	1				1
American Robin	183	70	226	13	492
Gray Catbird	18	4	15		37
Cedar Waxwing	240		626	19	885
European Starling	2,050		1,142	161	3,353
Solitary Vireo			1		1
Warbling Vireo	5		13		18
Philadelphia Vireo	1		4		5
Red-eyed Vireo	15		72	11	98
Tennessee Warbler	4	1	5		10
Nashville Warbler	11		15	3	29
Northern Parula	2				2
Yellow Warbler	10		14		24
Chestnut-sided Warbler	5	2	39	6	52
Magnolia Warbler	4	3	40	7	54
Cape May Warbler	2		7		9

<u>Species</u>	<u>SW</u>	<u>SE</u>	<u>NW</u>	<u>NE</u>	<u>Total</u>
Black-thr. Blue Warbler	2		6	1	9
Yellow-rumped Warbler	43	1	102	2	148
Black-thr. Green Warbler	3	1	21	15	40
Blackburnian Warbler	5		16	1	22
Pine Warbler	1		2		3
Palm Warbler	1				1
Bay-breasted Warbler	5		17	4	26
Blackpoll Warbler	2				2
Black & White Warbler	7	2	38	3	50
American Redstart	3	1	32	12	48
Ovenbird	16		18	2	36
Northern Waterthrush	4		2		6
Common Yellowthroat	13	24	28	13	78
Wilson's Warbler	5		14	1	20
Canada Warbler	7		6		13
Scarlet Tanager	4	1	13	6	24
Northern Cardinal	4		2		6
Rose-breasted Grosbeak	7	2	102	19	130
Indigo Bunting	1			1	2
Rufous-sided Towhee			3		3
Chipping Sparrow	12		106	36	154
Field Sparrow			3		3
Vesper Sparrow				1	1
Savannah Sparrow	18	292	25	9	344
Song Sparrow	62	76	101	9	248
Swamp Sparrow	2	34	7	3	46
White-throated Sparrow	42	6	46	6	100
Dark-eyed Junco			3		3
Bobolink	50	182	670	5	907
Red-winged Blackbird	20,650	78	213	2,100	23,041
Eastern Meadowlark	8	3	1	4	16
Common Grackle	579	252	213	62	1,106
Brown-headed Cowbird	42	2	183	1	228
Northern Oriole	11	10	12		33
Purple Finch			10	3	13
House Finch	8		4		12
American Goldfinch	100	53	310	31	494
Evening Grosbeak			4	40	44
House Sparrow	270	23	76	2	371
Number of Species	127	101	126	78	166

1989 Amherst Island Field Trip

Roy John

On February 26th, an expectant and hopeful group of Ottawa Field-Naturalists' Club members climbed on board a brand new bus and set off for Amherst Island.

Before arriving at the island, we stopped at the village of Ivy Lea. We had seen several species of ducks here last year, but the river was more open and the ducks were more dispersed. We managed to get good looks only at Goldeneye, Greater Scaup and Common Merganser. Our enthusiasm rose, however, when Colin Gaskell picked out an adult Bald Eagle on the far bank. As it sat on the same perch, we were all able to set up telescopes and get a satisfactory view.

We left Ivy Lea with what should have been enough time to catch the ferry, but as we travelled the 401 it slowly became apparent that we were not making good progress. For some reason, the bus seemed to lack power, and it kept losing speed on the hills. We arrived at the dock just in time to see the ferry pull away, almost empty. There was nothing to do but wait for the next one in one hour.

When we did arrive at the island, we were well rewarded. A careful search of the most famous "owl" woodlot got us three Northern Saw-whets. Touring the field netted us nine Snowy Owls. The best performance came from a superb white male. He flew down the road toward the bus before veering off to land on the ice. We also had a wonderful display by about 20 Short-eared Owls. They flapped over the field like giant moths and occasionally rested on fence posts, looking like giant brown-speckled bananas.

The hawk population was very low. We saw only one Red-tailed Hawk actually on the island. We did have excellent views of some light phase Rough-legged Hawks as well as a dark phase bird. The dark phase Rough-legged Hawk is one of the most striking raptors and this bird was a beautiful example. We also watched a total of five Northern Harriers, and some of the group saw an American Kestrel.

In general, the small birds were scarce too. We did see Mourning Doves, House Finches, Northern Cardinals and so on. This year, the trip did not get as wide a diversity of species as it has in the past. This was compensated for by the wonderful performances we got from those birds we did see. □

Coming Events

arranged by the Excursions and Lectures Committee
For further information, call the Club number (722-3050).

Times stated for excursions are departure times. Please arrive earlier; leaders start promptly. If you need a ride, don't hesitate to ask the leader. Restricted trips will be open to non-members only after the indicated deadlines.

ALL OUTINGS: Please bring a lunch on full-day trips and dress according to the weather forecast and the activity. Binoculars and/or spotting scopes are essential on all birding trips. Unless otherwise stated, transportation will be by car pool.

REGISTERED BUS TRIPS: Make your reservation for Club bus excursions by sending a cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A 0P7, at least ten days in advance. Include your name, address, telephone number and the name of the outing.

EVENTS AT THE MUSEUM: Club members should be prepared to show their membership cards to gain access to the National Museum of Natural Sciences for Club functions after regular Museum hours. There may be a charge for parking in the Museum lot.

Sunday FERN IDENTIFICATION TRIP
2 July Leader: Bill Arthurs (225-6941)
1:00 p.m. Meet: Elmvale Shopping Centre, northeast corner of
parking lot, St. Laurent Blvd. and Smyth Road.
This will be a general interest botanical walk along
the New York Central right-of-way with a special
emphasis on some of the local species of ferns.

Thursday OUTING TO BILL'S FARMLAND AT BURRITTS RAPIDS
6 July Leader: Bill Gummer (596-1148)
8:30 a.m. Meet: Sears, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue.
This will be a general interest walk to see various species of birds and wildflowers. Pack a picnic lunch and binoculars for this leisurely trip.

Sunday BUTTERFLY HABITATS
9 July Leader: Peter Hall (733-0698)
9:30 a.m. Meet: Neatby Building, front entrance, Central Experimental Farm, one block west of the Irving Place - Maple Lane Drive stoplight on Carling Avenue.
This all-day outing is a follow-up to the June monthly meeting that detailed the great variety of butterfly habitats in the Ottawa District. A number of these habitats will be visited, from wetlands to woodlands, to illustrate this diversity. Bring a lunch and a butterfly net if you have one.

Sunday BUS TRIP TO SHAW WOODS
23 July Leader: Albert Dugal
8:00 a.m. Meet: Sears, Carlingwood Shopping Centre, Carling to Avenue at Woodroffe Avenue.
6:00 p.m. Cost: \$9.00
This unique and complex woods contains some of the tallest trees in Eastern Ontario, with an ancient cedar swamp and attractive trees in essentially virgin condition. Bring a lunch and insect repellent. Participants should register at least ten days in advance as directed under Registered Bus Trips.

Sunday BIRDING TOUR OF THE EASTERN SEWAGE LAGOONS
30 July Leader: Bruce Di Labio (729-6267)
7:00 a.m. Meet: Elmvale Shopping Centre, northeast corner of parking lot, St. Laurent Blvd. and Smyth Road. Participants will visit several sewage lagoons east of Ottawa to observe migrating shore birds and interesting species of breeding waterfowl. To register and learn further details, please telephone the leader.

August NIGHT-FLYING MOTHS IN AUGUST
Date and Leader: Don Lafontaine (225-1841)
time to This trip will take place from 9 p.m. until midnight
be decid- on an evening in August when the weather appears
ed favourable. If you are interested in participating, leave your name and phone number with the leader and he will contact you when a date and meeting place have been set. Don will attract a variety of moths to a sheet with a light and these will be identified with the aid of the Peterson Field Guide, *A Field Guide to the Moths of Eastern North America*.

Sunday BUS OUTING: COLLECTING INVERTEBRATE FOSSILS FROM
13 August ORDOVICIAN LIMESTONE ROCKS IN AND AROUND OTTAWA AND
9:00 a.m. PAKENHAM
Leader: Janette Dean
Meet: Sears, Carlingwood Shopping Centre, south side,
 Carling Avenue at Woodroffe Avenue.
Cost: \$10.00 (see Bus Registration details)
Register early for this very interesting all-day bus
outing. Bring a lunch and a hammer and hand lens.

Saturday LATE SUMMER BIRDING IN THE WEST END
26 August Leader: Roy John
7:30 a.m. Meet: Britannia Drive-In Theatre, Carling Avenue.
Binoculars are essential and waterproof footwear is
advisable for this half-day outing.

Sunday FALL BIRD COUNT
27 August Compiler: Daniel Perrier (746-6716)
Participate in the annual count of the fall bird population within the 50-km radius circle of the Ottawa District. For details, telephone the compiler.

Date to MUSHROOM FIELD TRIP
be decid- Leader: Jim Ginnis
ed Meet: Supreme Court Building, front entrance,
Wellington Street.
This outing will be limited to 25 people. Participants must register before September 18th by telephoning the Club number (722-3050 after 10 a.m.). When a date and location have been selected, registrants will be notified.

Sunday ASTERS AND GOLDENRODS
3 Sept. Leader: Ellaine Dickson (722-3050)
9:00 a.m. Meet: Lincoln Heights Galleria, northeast corner at
Richmond Road and Assaly Road.
If you want to know about goldenrods just aster.
Bring a snack for this half-day trip. Dress according
to the weather.

Sunday NINTH ANNUAL SEEDATHON
10 Sept. Support The Ottawa Field-Naturalists' Club winter bird
feeding operations by sponsoring Bruce Di Labio and/or
Gordon Pringle annual Seedathon. Pledges may be sent
to: SEEDATHON, The Ottawa Field-Naturalists' Club,
Box 3264, Station C, Ottawa, Ontario K1Y 4J5.

Tuesday OFNC MONTHLY MEETING
12 Sept. Meet: Salon, National Museum of Natural Sciences,
8:00 p.m. Metcalfe and McLeod Streets.
Admission: at least one natural history slide or a 50
cent donation to the Alfred Bog Fund.
This popular event will provide an excellent chance to
share your favourite natural history slides and remin-
iscences of trips, both local and far afield, with
fellow members. Any number of slides up to 15 will be
welcome, and up to 15 minutes will be allotted for
each presentation. Those bringing the mandatory one
slide need not speak if they do not wish to do so.
Those bringing more than one or two slides please
contact Catherine O'Keefe (745-4441) to prearrange
their presentations.

Sunday ANNUAL PICNIC: BUS TRIP TO THE MILL OF KINTAIL
17 Sept. Meet: Sears, Carlingwood Shopping Centre, south side,
8:00 a.m. Carling Avenue at Woodroffe Avenue.
to Cost: \$8.00 (see Bus Registration details.)
4:00 p.m. The Mill of Kintail Conservation Area is owned and
operated by the Mississippi Valley Conservation Au-
thority. With its scenic beauty, historical points of
interest, and woodland and riverside trails, it is an
ideal place for a picnic. We may see yew trees, beech
drops and silver-rod. As usual, cheddar cheese, ap-
ples and cake will be provided, but don't forget to
bring a lunch.

Saturday FALL BIRDING FROM MORRISBURG TO CORNWALL

23 Sept. Leader: Bruce Di Labio (729-6267)

8:00 a.m. Meet: Brooke Claxton Building, Department of Health and Welfare, de la Columbine Boulevard at Tunney's Pasture, front entrance.

Participants will visit various spots along the St. Lawrence River, including Nairne Island and the Cornwall power dam, to observe shorebirds, gulls and migrating landbirds. Dress warmly, wear waterproof footwear, and bring a lunch for this all-day outing. Binoculars and/or scopes are essential. Transportation will be by private cars. Only a limited number of participants will be accepted. To register and learn further details, telephone the leader.

Saturday WATERFOWL FOR BEGINNERS

30 Sept. Leader: Colin Gaskell (728-7217)

8:00 a.m. Meet: Entrance gate to the Britannia Filtration Plant (Bus #18 stops here.)

An excellent opportunity to learn to identify a variety of diving and surface-feeding ducks. Participants may expect to see Wood Ducks and Hooded Mergansers, two of the most beautiful species. Bring a snack for this half-day trip.

Sunday AUTUMN COLOURS BUS TRIP

1 Oct. Leaders: Ellaine Dickson and Aileen Mason

9:00 a.m. Meet: Supreme Court Building, front entrance, to Wellington Street

4:00 p.m. Cost: \$8.00 (See Bus Registration details.)

Enjoy a scenic ride through the Outaouais region on the way to the Forest Educative Centre at Lac-la-Blanche. There will be some emphasis on tree identification along the trail system. Crisp air, a leisurely pace and the splendour of autumn leaves will be the order of the day. Bring a lunch and dress warmly.

Tuesday OFNC MONTHLY MEETING

10 Oct. AN ILLUSTRATED TALK ON ITEMS OF NATURAL HISTORY FROM

8:00 p.m. ANDROS ISLAND IN THE BAHAMAS

Speakers: Tracey and Janette Dean

Meet: Auditorium, National Museum of Natural Sciences, Metcalfe and McLeod Streets.

Members of the Ottawa Banding Group visited the Forfar Field Station last February and Tracey and Janette have details of the birds they banded and also some observations on geology and fishes of the coral reef. Experienced bird banders are especially welcome to participate in this continuing project. Many of the slides were taken by Beryl Johnson.

Saturday LATE FALL BIRDING
21 Oct. Leader: Roy John (226-2019)
8:00 a.m. Meet: Britannia Drive-In Theatre, Carling Avenue.
Bring a snack and binoculars for this half-day outing.

Sunday TWELFTH ANNUAL JOINT OUTING WITH THE OTTAWA RIDEAU
22 Oct. TRAIL CLUB IN MURPHY'S POINT PROVINCIAL PARK
9:30 a.m. Meet: Sears, Carlingwood Shopping Centre, south side,
Carling Avenue at Woodroffe Avenue.

General interest ramble exploring the trails in
Murphy's Point Provincial Park where the autumn leaves
should be at their best. Bring a lunch and waterproof
boots. Optional stop at the Maple Bush Tea Room in
Perth on the way home. Transportation by car pool.
For further information, call Eileen Evans at 741-0789.

* * * * *

**BUS TRIP TO CAP TOURNENTE AND RIVIERE-DU-LOUP
TO SEE SNOW GEESE AND WHALES**

Time: Friday, October 13, to Sunday, October 15.

Leaders: to be determined. Cost: about \$250.00.

The Club is proposing to run a three-day trip to view
migrating Snow Geese at Cap Tourmente and whales in the St.
Lawrence River. We would expect to see Minke, Fin, Beluga and
perhaps Blue Whales.

The cost includes bus transportation, five-hour whale-
watching trip, ferryboat fares and two nights' accommodation. If
you are interested, please register by phone immediately (722-
3050). If not enough people are interested, the trip will be
cancelled. Details and itinerary will be provided later.

* * * * *

PEMBROKE FESTIVAL OF SWALLOWS

August 10 to 13, 1989

Members of the Pembroke and Area Bird Club invite Ottawa
Field-Naturalists' Club members to join with them in Pembroke at
sunset as upwards of 100,000 swallows stage their spectacular
aerobatic display. The best viewing time starts at 7:45 p.m.
during the festival period. (For further information, read
Trail & Landscape 19(3): 141-142 (1985).)

Explore the bluebird trails with over 900 boxes in the
Pembroke area, and on August 11, 12 and 13 visit the Wildlife
Art Show and Sale featuring over 50 nationally acclaimed and
local artists. For further information, telephone Jacques
Bouvier at (613) 735-0366.

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